

only of the ever-increasing number of instances of cardiac and cardiovascular disease, but equally to the vital necessity of separating the physical signs and symptoms that are not primarily due to cardiac disease from those that are.

We must, by every rational endeavor, avoid laying upon the heart an *étiological* overload in the form of secondary symptoms.

THE CAUSES OF BACKWARD DISPLACEMENT OF THE UTERUS.

BY PHILIP F. WILLIAMS, M.D.,

INSTRUCTOR IN OBSTETRICS, UNIVERSITY OF PENNSYLVANIA, ASSISTANT GYNECOLOGIST TO THE PRESBYTERIAN HOSPITAL, PHILADELPHIA.

THE varied symptom-complex of real or fancied injuries sustained by a railroad, trolley, or traffic accident often presents some reference to the condition of the pelvic organs, and in an examination of the pelvis in an attempt to locate the seat of the trouble a retrodisplaced uterus may be found. That such a condition may occur through an accident seems firmly fixed in the public mind, and even among the profession the idea that sudden or acute retrodisplacement of the uterus can occur through falls, straining or similar injuries apparently finds credence. So by the patient, and not infrequently by the medical attendant, the newly discovered retrodisplacement is held as the cause of the backaches, headaches, and other manifestations of the nervous breakdown or neurasthenia which often follows such an accident. With the idea of such an *étiological* factor for the condition, legal action to recover damages is instituted against some common carrier, railroad, or trolley line on which at a previous time the patient may have been thrown from her seat or suffered a fall from derailment or other mishap.

The question arises as to whether such a condition as acute retrodisplacement of the uterus may be produced by a sudden fall, strain, or injury. A reference to the standard text-books on diseases of women shows that while such a cause is not considered by some authors, it is mentioned by others simply to deny their belief in it, and where it is classed as a possible factor, it must be regarded as occurring only in extremely rare instances. As a rule, simple retrodisplacement of the uterus *per se* seldom if ever causes symptoms for which medical relief is sought, the accompanying pathology in most cases being responsible for the subjective symptoms. It is possible that a partially retroverted uterus or a uterus already in retroversion might by some sudden increase in pressure of the abdominal contents, as by straining or violent injury, be forced down in the pelvic cavity. In such an instance the sudden

ligamentary strain might cause immediate pelvic pain. But in many cases the pain referred to the pelvis is of muscular origin, and has nothing whatever to do with a displaced uterus. The patient previously ignorant of this condition may have noticed no symptoms resulting therefrom, but her attention will remain focussed upon it long after the real effects of the injury have passed away. It would seem that under conditions of normal tonicity the supporting ligaments of the uterus, accustomed to the actively physical life of the average woman, would hardly permit overstretching enough to allow a complete retrodisplacement of the uterus to occur.

There are many factors which influence the production of displacements of the uterus. The one most frequently noted is child-birth, with the accompanying trauma to the pelvic floor and pelvic diaphragm, the early rising after labor, with a subinvolved uterus ill supported by the imperfectly restored ligaments, or on the other hand, the long dorsal decubitus favoring by gravity the backward displacement of the heavy uterus. Premature interruption of pregnancy, abortions, and miscarriages, so lightly considered by many as to the after-care, predispose in the same manner as labor at term. So in any claim as to the production of a retrodisplacement of the uterus through injury, the nature of any previous pregnancies, their mode of termination, and the attention received in the puerperium would be information of the highest importance.

So, too, any previous disease of the pelvis, infections, or tumors of the adnexa, and pelvic peritoneum with their resulting adhesions, changes in tone or structure of the supporting ligaments, the possibility of a metritis through contiguity, and a consequent weakening of the uterine structure through relaxation or atrophy, and tumors of the body of the uterus, may all cause retrodisplacements passing unnoticed for many months, and whose occurrence in the history of a claimant must be noted.

Congenital displacements often cause no symptoms until perhaps at puberty, when with the onset of menstruation various abnormal phenomena may occur. Or this function may be established normally and, after marriage, sterility often occasioned by the congenital retrodisplacement with its accompanying defects, acute anteflexion, shortening of the vaginal walls, and elongated and stenosed infantile cervix may lead to the first recognition of its presence. But if just previously to or about the time medical attention was required the patient suffered an accident resulting in a severe jar to the body or a fall, it will receive considerable attention as to the part it may have played in being responsible for the symptoms noted.

In order to ascertain to what extent a history of trauma in one form or other occurs in the average case of displaced uterus, I have, through the courtesy of Dr. B. C. Hirst, examined the histories of 529 cases of this condition occurring in his private practice. A

number of these cases, referred for pelvic examination as an aid in explanation of some obscure medical condition, represent accidentally discovered cases of symptomless retroposition. Childbirth at term, associated or not, with miscarriage, explains clearly the etiology of a group of 304 cases. In a similar way we can ascribe a previous miscarriage or miscarriages as causing the condition in a second group of 33 cases. The diagnosis of pregnancy or the abnormal symptoms resulting from pregnancy in a retrodisplaced uterus explains the discovery of the displacement in a group of 16 women. There remain two groups, one of 81 sterile married women, and a final one of 88 single women. The total number, 169, of these two groups seems rather high when one considers that childbirth is given as the most common etiological factor by most authorities. In but few of these cases of single or sterile married women was there a simple mobile retroplaced uterus. Some additional pelvic pathology, inflammatory disease of the adnexa, recent or old, and with adhesions, evidences of previous pelvic peritonitis, cystitis, appendicitis, and so on was usually present.

In 13 cases, slightly over 2 per cent. of the whole number of cases, a history of accident or trauma was found. In the first instance the patient had suffered a fractured hip by being thrown from a carriage several years previous to the pelvic examination, which was requested on account of dysmenorrhea and leucorrhea. As this condition followed a period of normal menstruation of four years after the carriage accident, and as she had been informed while undergoing treatment in another city that no displacement existed, it must seem impossible that the accident played any part in the production of this displacement. In the second case a single woman, aged twenty-eight years, menstruation began at twelve years of age. At this time she suffered a fall and was said to have injured her coccyx; for this injury she stayed in bed six weeks. She complained chiefly of pains in the lower abdomen resembling menstrual cramps, which she said followed a second fall received a month previous to the examination. A complete retroversion was found. It would be difficult to say which, if either, of the falls was responsible for the present condition. The third case, a single woman, had a fall or injury in a gymnasium ten years before the pelvic examination. Six years previously her cervix uteri had been dilated to relieve dysmenorrhea, and a pelvic peritonitis developed from which she nearly died. The infection subsequent to the injury would be the most logical explanation for the adherent retroversion. The fourth case was a married woman who a few months before had a miscarriage at two and a half months, occasioned according to her history by a fall down stairs. Her chief complaint was exhaustion, although there was some first-day menstrual pain. She had an apical tuberculous lesion and poor cardiac musculature. These

two medical conditions would, no doubt, be more at fault in producing her general weakness than the retrodisplaced uterus found on pelvic examination, and for which she blamed the fall. The fifth case was a married woman who, four years previous to the pelvic examination, during her first year of married life had a miscarriage at three months. Three years later she fell across a chair. Her menstrual history was normal until three months before the examination, when she developed metrorrhagia. She had a bearing-down feeling and complained of pain on defecation. Examination revealed a fissure in ano, marked pain over the appendix, a large cervical polyp, and a retroversion. As polypi are so frequently the result of retained secundines, especially following abortions, the retroversion was much more likely to have been the result of the premature interruption of the pregnancy with the admittedly poor after-care than the minor accident of falling over a chair. In the sixth case the woman fell astride a chair with the development of abscesses, which required incision. This is the history of trauma in a woman whose retrodisplaced uterus was accompanied by pain in the ovaries and metrorrhagia. The history here is too scant to judge what merit the fall might have had in producing the displacement. The seventh patient had a fall fifteen years before the pelvic examination, but the symptoms pointing to the displaced uterus only appeared after a miscarriage a few months previously. The recent miscarriage in this instance is much more likely to have been the cause than the injury sustained so long before. The eighth case, a woman married eight years, had her first pregnancy interrupted, according to her history, by a fall the nature of which is not specified. She dated her chief complaint of pain in the side to a second fall four months before the examination. She had appendicitis, a floating right kidney, and a displaced uterus. While the first fall may have caused the miscarriage, it is just as likely that the uterus was left in a retroverted position after the miscarriage, and that the symptoms of the total pelvic pathology were aggravated enough by the second fall to necessitate a pelvic examination by which the displacement was found. The ninth case, a single woman, dated her trouble, leucorrhea and pelvic discomfort to excessive horseback-riding seven years before the examination. It might be possible that the pelvic viscera and the supporting ligaments would permit a displacement through a long-continued strain as indicated in the history. The tenth case, a single woman, complained of pain along the sciatic nerve, not affected by menstruation, and some irritation of the vulva. The symptoms were stated by the patient to have been apparently started by a fall, and aggravated by another fall. Examination disclosed an anteflexed and retroposed uterus of an infantile type. The condition of the uterus is that most commonly found in cases of congenital retrodisplacement, and it is just as likely that this

was the original condition as that it was caused by the fall. The eleventh case was a single woman who dated her chief complaint of leucorrhea from a fall two years earlier. She had severe menstrual cramps after the fall and pain on the right side of the abdomen. Examination revealed a thickening in the base of the right broad ligament and the uterus halfway over. Here the fall probably had less to do with the uterine condition than the inflammatory condition alongside it. The twelfth case, a single woman, complaining of dysmenorrhea, leucorrhea, and backache from puberty, did not have her symptoms affected for the worse by a fall down three stairs a short time before the examination, and which resulted in a severe sprain of an ankle- and knee-joint.

The thirteenth case, a single woman, likewise complained of dysmenorrhea and backache from puberty eleven years before. She had no increase in the severity of the symptoms as a result of a fall from a carriage five years before the pelvic examination revealed the presence of a retrodisplaced uterus.

It is seen, therefore, from a study of these few cases how small and uncertain extent such injuries as falls and strains can be considered as a cause of uterine displacements. It is true that an occasional case is reported in the literature where a uterus found in perfect position a short time before an injury was sustained has been found retrodisplaced on examination made immediately afterward. The suspicion must arise that some accompanying pelvic lesion existed or an examination would hardly have been sought before the fall.

It should be necessary in a legal action to recover damages to show that the patient had been healthy and physically able, and that the uterus was in a normal anteflexed position before the accident. As has been shown above, some women have apparently perfect health and are physically able, and yet whose displacement may only have been noticed after marriage on account of sterility; it would seem difficult to prove satisfactorily that the uterus could have been in normal position without a previous examination. The nature of the accident would have to be considered as to the manner in which it could produce the retrodisplacement of a previously normal uterus. It is possible to conceive, as above stated, that a partially retroverted uterus could by a hard fall on the back or buttocks be converted into a completely retroverted uterus, but it is equally inconceivable that a fall forward on the face or side could be able to produce any such displacement. In so far as the subjective symptoms are concerned it is seen that few if any symptoms are produced by a simple retrodisplacement. It should be necessary to have proved that immediately after the accident a retrodisplacement did exist. But although after such an accident a retrodisplacement was discovered, this fact would in itself be no evidence that a displacement had not existed previously, even though no symp-

toms were manifested by it. That retroversion may be caused by trauma is possible, but it is apparent, from the facts stated above, that traumatic retrodisplacement of the uterus is very rare; and that unless it can be shown that the uterus was in normal position just before the accident or injury, it is impossible to prove that the displacement had a traumatic origin.

BIBLIOGRAPHY.

Gow, W. J. Retroversion of the Uterus, *British Med. Jour.*, March 2, 1912.
de Bovis, R. *Rétrodéviations de jeunes filles et de jeunes femmes*, *Semaine Médicale*, May 30, 1908.
Graham, H. M. Retroflexion and Retroversion of the Uterus, *Lancet-Clinic*, March 4, 1908.
Mayer, A. *Zur Klinik der Retroflexio*, *Deutsch. med. Wehnschr.*, December 3, 1908.
Fritsch, H. *Retroflexio Uteri und Unfall*, *Deutsch. med. Wehnschr.*, October 12, 1911.
Pitts, H. C. Displacements of the Uterus, *Providence Med. Jour.*, March, 1909.
Donald, A. and Shaw, W. F. Retroflexion of the Uterus, *Practitioner*, June, 1913.
Ziegenspeck, R. Acute Traumatic Displacement of the Uterus, *Münch. med. Wehnschr.*, July 23, 1912.
Keiller, W. Retrodisplacements of the Uterus, *Texas State Med. Jour.*, May, 1909.
Stevens. Diseases of Women.
Reed. Diseases of Women.
Ashton. Practice of Gynecology.
Dudley. Principles of Gynecology.
Hirst. Diseases of Women.

CERTAIN UNCLASSIFIED FEVERS: THE TYPHACEÆ (TYPHOID GROUP) AND ENTERICOID OR PARAENTERIC FEVER.

BY RICHARD STEIN, M.D.,

VISITING PHYSICIAN TO THE GERMAN AND THE LEBANON HOSPITALS, NEW YORK.

By unclassified fevers I understand certain forms of infectious fevers which, though frequently met with, and, in part, at least, well known to clinicians in a general way, have not as yet been definitely named. This is due to the fact that often they are passed over as unimportant, and have therefore not been subjected to an exhaustive bacteriological study. Perhaps the main reason why they have not been differentiated is, that our present methods of investigation—bacteriological, chemical, and otherwise—are not far enough advanced to enable us to classify these fevers nosologically.

The fevers under discussion are primarily caused by infective agents, as distinguished from those fevers which are due to disturbances of the function or of metabolism. This latter group may be designated as the fevers of endogenic origin. Menstrual fever may be cited as an example of this type.